June 30, 2015

NAME
ADDRESS
CITY, STATE ZIP

Dear NAME:

We will celebrate the ORS' 11th birthday in July. As each year passes, I continue to marvel at the dedication of our staff, your strong support, and the strides we have made in representing the public interest in utility regulation. On July 1st, a new chapter begins as the Energy Office officially becomes part of the ORS. A high priority that will involve the Energy Office will be the development of a State Energy Plan.

On March 12th, 2015, SCE&G filed a petition seeking to increase its capital cost schedule and to amend the construction schedule for Units 2&3 at the VC Summer nuclear station. SCE&G seeks to add approximately $698 million to the 2007 budget excluding inflation adjustments and to extend the substantial completion dates to June 19, 2019 and June 16, 2020 for Units 2&3 respectively. Further, along with changes in escalation rates, this addition will increase the gross construction cost of the Units in current dollars from $5.7 billion to $6.8 billion for SCE&G's 55% share.

The ORS has devoted a great deal of time and resources to this issue. Under the Base Load Review Act (BLRA), SCE&G is entitled to these modifications so long as the delays and cost increases are not the result of imprudence on the part of the Company. Based on ORS's review, we have not found a preponderance of evidence to suggest that imprudence on the part of SCE&G is the cause.

By Order No. 2009-104(A), the Commission established a return on equity of 11%, which is applicable for revised rates filings under the BLRA. This return on equity has been consistently used for each revised rates filing since issuance of the initial BLRA order in 2009. However, the ORS, the South Carolina Energy Users Committee, and SCE&G have reached an agreement that beginning with any revised rates filing made on or after January 1, 2016, and prospectively thereafter until such time as the Units are completed, SCE&G agrees to develop and calculate its revised rates filings using 10.5% as the return on common equity, rather than the approved return on common equity of 11%. This agreement will result in estimated savings of $15 million. In addition, it will decrease the Allowance for Funds Used During Construction rate which will lower the capital costs, thus causing less depreciation expense and property tax expense.

Construction progress continues at the VC Summer Nuclear Units 2&3 site. Due to the prolonged hot weather, the contractor altered work schedules to allow earlier starting times that should lessen heat-stress issues for workers. The next major structural module for Unit 2, CAO1, is complete and ready to be installed after the Layer 3 concrete is poured and cured. In addition, concrete was poured in the Unit 2 Nuclear Island which, when cured, will allow the Shield Building construction to begin. Module CA22 (floor and wall module for piping and penetrations) was set in the Auxiliary Building which allows the contractor to continue to backfill and start construction of the Annex Building. Turbine Building construction also continued in Units 2&3 with the pouring of basemat concrete and steel erection.

ORS staff from several departments toured the VC Summer construction site on June 19th.

In the Duke Energy Progress (DEP) annual fuel review, the ORS reduced DEP's request by approximately $7 million to reflect the impact of DEP's purchase of capacity from the North Carolina Electric Municipal Power Agency and approximately $2 million to remove the cost of replacement power due to an outage at the Robinson 2 nuclear plant. Total adjustments amount to a reduction of $3.94 per month (from $105.14 to $101.20), which is 3.75% of an average residential bill using 1,000 kilowatt hours.

Electric, Legal, and Consumer Services staff members participated in discussions with Duke Energy Carolinas (DEC) and DEP regarding the handling of special-needs accounts. The companies are fine-tuning their protocols for disconnection notifications to customers who have varying degrees of special needs, with the most critical category being those who rely on various forms of life support.

Planning is underway for the American Public Gas Association/Security Integrity Foundation Conference that the ORS Pipeline Safety hosts biannually. The conference will be August 4-6 at the Embassy Suites in Columbia.

Pipeline Safety staff continued their inspections around the State and participated in the quarterly conference call for the Southern Region hosted by the Pipeline and Hazardous Materials Safety Administration, a division of the US Department of Transportation (DOT). Also, in response to a request PHMSA made of all state pipeline safety programs, the ORS certified that it has the necessary statutory authority to conduct inspection and enforcement activities with regard to pipeline safety.

On June 11th, ORS Pipeline inspectors observed the SCE&G "smart pig" inspection tool which traveled through approximately 16 miles of pipe (from Ladson, SC to the Hagood gas turbine station) checking for defects. Data collected from this inspection will be compiled into a report.

Two of our pipeline inspectors continued their training this month with one participating in PHMSA training in Oklahoma City and the other participating in welding-inspection training in Texas.

Continuing the outreach begun last month, the ORS rail manager briefed the State Emergency Response Team on the new tank-car rules promulgated by the DOT. At the request of the SC EMD, the ORS had produced a summary of the new tank-car rules dealing with, among other issues, how to correctly respond to rail incidents involving hazardous materials.

The ORS inspector for the Operating Practices (OP) discipline participated in recurrency training conducted by the FRA in Louisville, KY. At the request of the FRA, this inspector also trained an FRA employee in the OP discipline during a weeklong session.

Staff involved in the EMD effort participated in several events this month. Among them was the Santee North Dam tabletop exercise on June 9th and 23rd. The focus of this simulation was to test emergency notification procedures. Staff also participated in planning meetings for the Southern Exposure exercise to occur in late July. Southern Exposure will be a statewide simulation drill dealing with a nuclear release at Robinson plant in Hartsville. Staff is participating today in a re-entry tabletop exercise that focuses on establishing criteria for re-entry into evacuated areas after a hurricane.

The SC Equipment Distribution Program (SCEDP) continues its outreach activities around the State; this month included an exhibit at DAK Americas Health Fair as well as several visits to audiologists in the Columbia area. The SCEDP will soon be issuing an Invitation for Bid for the Telecommunications Relay Service (TRS).

If you have any questions or concerns, please feel free to contact me. Thank you for your ongoing support of the Office of Regulatory Staff.

Sincerely,

C. Dukes Scott
Executive Director

Consumer Services

From July 26, 2004 through May 31, 2015, the agency processed a total of 36,245 consumer complaints and inquiries. Of this total, 140 constituent referrals were initiated by members of the General Assembly, and 303 constituent referrals were initiated by the Governor's Office.

Electric	21,124
Gas	1,363
Sewer	807
Telecommunications	10,518

Incumbent Local Exchange Carriers	6,498
Inter-exchange Carriers	1083
Competitive Local Exchange Carriers	1527
Prepaid CLEC	497
Coin phone	25
Inmate telecommunications provider	54
Prepaid phone card	12
Non-regulated telecom entity/service	822
	10,518

Transportation	408
Water	1727
Misc.	298
Total	36,245

Noteworthy items:

- $1,021 recovered for a water customer as a courtesy leak adjustment after ORS intervention

September 30, 2015

NAME
ADDRESS
CITY, STATE ZIP

Dear NAME:

On September 23, 2015, the Commission approved a rate increase for SCE&G under the Base Load Review Act (BLRA). SCE&G requested to raise rates by $69,648,000. We reduced this amount by $5,122,719 for a net increase of $64,525,281, which was approved by the Commission. This is an overall increase to retail customers (excluding lighting) of 2.57%. For residential customers using 1000 kWhs monthly, this is an increase of approximately $3.71 per month. The total monthly bill will be $149.58, of which $ 23.17 or 15.5% is attributable to the nuclear construction. The cumulative amount projected to be spent on VC Summer Units 2 & 3 (Units) by December 31, 2015 is approximately $3.575 billion. A history of the BLRA revised rate increases is attached.

By comparison, the monthly bill for Duke Energy Progress customers using 1000 kWhs monthly is $101.20, and for Duke Energy Carolinas customers the bill is about $116.00.

We have issued our Request for Proposal to engage a Certified Public Accountant firm to conduct an independent analysis of whether the revised rates provision under the BLRA that is being utilized for the construction of the Units by SCE&G is cost beneficial to the customer. The firm will be asked to compare the estimated capital costs of the Units and the operational costs of the Units under the BLRA versus accumulating the cost of capital over the period of construction.

The ORS is supportive of the construction of the Units and of the BLRA. We believe that the Units will be the key to our economic development, to reliable and affordable electricity, and to meeting the goals of reducing our carbon footprint. With today's technology, nuclear is the single greatest base load carbon-mitigation energy resource available.

We also believe that maintaining financial integrity for utilities is crucial so that they can raise the necessary capital to invest in and maintain the infrastructure required to provide adequate and reliable service. Nevertheless, with the construction delays and budget increases that have occurred, it is reasonable to determine whether the revised rates provision – which provides for recovery of the financing cost (or cost of capital) on an annual basis – continues to be to the customers' benefit.

On August 15, 2015, SCE&G submitted its 2015 2nd Quarter Report related to construction of the Units and covering the quarter ending June 30, 2015. SCE&G reported that a total of 106 of the 146 specific BLRA milestones were completed by the end of that quarter.

The ORS' review of the Report focuses on SCE&G's ability to adhere to the approved schedule and approved budget. During the 2nd quarter of 2015, several major construction milestones were completed. However, the project continues to experience delays due to design and delivery issues.

The critical path continues to be centered on Unit 2 Nuclear Island work necessary to allow additional concrete pours inside the Containment Vessel and within the Auxiliary Building perimeter walls.

Throughout September, work continued to develop the State Energy Plan. The deadline for comments on the initial draft outline of the Plan was September 4th. We received comments from Duke Energy, SCE&G, Piedmont Natural Gas, and the Electric Cooperatives of South Carolina. The Coastal Conservation League requested an in-person meeting to assist them in formulating comments.

The comments ranged from broad, long-term suggested considerations to calls for the evaluation of specific technologies and regulations. Examples of general comments include 1) the need to consider the impact of high levels of distributed consumer-sited generation and 2) the need to take into account the emissions impact of a trend toward greater use of natural gas for electric power generation versus direct use by consumer. More specific comments suggest that we address a long list of regulations such as the 111 (b) and (d) rules as well as Steam Effluent Limitation Guidelines, and Mercury and Air Toxics Standards. To prevent duplicative efforts, another suggestion is to closely align the state energy planning process with the creation of a State Implementation Plan for 111 (d) compliance. While the comment deadline has passed, we intend to continue to engage stakeholders and obtain input regarding what should be included in the Plan.

In addition, we sent out a request for data to Duke Energy, SCE&G, Lockhart Power, and Santee Cooper. The data collected will provide a baseline that illustrates the current electric generation mix, impact of utility DSM/EE programs, other aspects of their operations, and plans for the next ten years.

State agencies, public colleges and universities, and K-12 schools are required to report their energy use and cost per square foot to the ORS Energy Office. Data has been collected since the mid-1990s, thus creating a larger benchmarking database than any other state. This year's data was due on September 1st. The Energy Office is now working with those agencies having difficulty completing the report and is assisting others in addressing data anomalies. The data will be assessed and compiled into a report for the General Assembly detailing compliance with the mandate to reduce energy consumption by 20% by the year 2020 over a year 2000 baseline.

Staff continues to work on the cost-shifting report that Act 236 requires to be completed by December 31st of this year. We posted a request for public input on the ORS web site and also sent the request to all intervenors in the Act 236 dockets. Comments were received from a variety of stakeholders including the electric IOUs, conservationists, large industrials, solar advocates, and electric cooperatives. We are working with our consultant E3 to analyze data from the utilities. We intend to circulate a draft report for public comment in the coming months.

Duke Energy Carolinas (DEC) annual fuel review included, for the first time, Distributed Energy Resource Program (DERP) costs amounting to 43 cents monthly per residential customer. This increase due to DERP costs is netted against a fuel *decrease* of $1.49, which results in a net reduction to the customer's bill of $1.06.

The ORS provided oversight for the transition to mandatory 10-digit dialing in the 843 area code region. A press release issued by our office during the week prior to the transition, which began September 19th, generated considerable media interest and coverage by several news outlets in that portion of the State. In October, the final phase will begin as the 854 area code is introduced for new numbers issued in the 843 region.

Pipeline Safety Inspector Michael Bunting has retired. We are in the process of interviewing for this position. Meanwhile, Inspector Johnny Eustace completed his last PHMSA certification class and is now a fully certified inspector.

One of our inspectors attended the convention of the National Association of Pipeline Safety Representatives (NAPSR) in Arizona. Staff is preparing for the Calendar Year (CY) 2014 annual audit by the Pipeline and Hazardous Materials Safety Administration (PHMSA), which will occur in October. Participation in NAPSR conferences lends favorably to the annual PHMSA review.

If you have any questions or concerns, please feel free to contact me. Thank you for your ongoing support of the Office of Regulatory Staff.

Sincerely,

C. Dukes Scott
Executive Director

Enclosure

SCE&G's Approved Rate Increases

Docket No.	Order No.	Approved Increase	Approved Retail Increase	Approved Residential Increase
2008-196-E	2009-104(A)	$7,802,491	0.43%	$0.48
2009-211-E	2009-696	$22,533,000	1.10%	$1.31
2010-157-E	2010-625	$47,301,000	2.31%	$2.87
2011-207-E	2011-738	$52,783,342	2.43%	$3.23
2012-186-E	2012-761	$52,148,913	2.33%	$3.28
2013-150-E	2013-680(A)	$67,240,232	2.87%	$4.18
2014-187-E	2014-785	66,238,000	2.82%	$4.11
2015-160-E	TBD	$64,525,281	2.57%	$3.71
TOTAL		**$380,572,259**		**$23.17**

SCE&G - Revised Rates Filings
Incremental Change

Rate Class	2008-196-E	2009-211-E	2010-157-E	2011-207-E	2012-186-E	2013-150-E	2014-187-E	2015-160-E
Residential	0.43%	1.21%	2.40%	2.56%	2.47%	3.00%	2.92%	2.59%
Small General Service	0.39%	1.07%	2.33%	2.40%	2.35%	2.93%	2.91%	2.68%
Medium General Service	0.41%	1.13%	2.37%	2.41%	2.26%	2.96%	2.91%	2.78%
Large General Service	0.34%	0.95%	2.15%	2.25%	2.10%	2.56%	2.56%	2.38%
Retail Total *(Excluding Lighting)*	**0.40%**	**1.10%**	**2.32%**	**2.43%**	**2.33%**	**2.87%**	**2.82%**	**2.57%**

December 21, 2015

NAME
ADDRESS
CITY, STATE ZIP

Dear NAME:

The holiday season provides an opportunity for us to reflect on some highlights of the past twelve months. The year 2015 was a landmark one for the ORS as we acquired new responsibilities arising from Act 236, expanded as an agency with the addition of the Energy Office, and continued in our daily work to represent the public interest.

Our staff members that work with EMD spent many hours this year planning for and responding to weather-related events and communicating with the utilities, electric cooperatives, Santee Cooper, the S.C. Association of Municipal Power Systems, and consumer fuel providers. The year 2015 tested us with inclement weather and record-low temperatures in January and February and an unprecedented flood in October. Through it all, ORS staff assigned to EMD duties went above and beyond. In the October flooding, we devoted over 645 hours to the ESF 12 (Energy) function during the 11-day activation period. With each crisis, we recognized areas for improvement and fine-tuned our team accordingly so that we were even better prepared to aid the public in the next emergency situation.

The Energy Office joined the ORS in July, and they have been a great addition. A major focus is creation of the State Energy Plan. This endeavor is a multi-year process for which we have gathered input from stakeholders and will continue to do so. At the same time, we are engaged with stakeholders in developing the State Implementation Plan (SIP) for compliance with the Environmental Protection Agency's 111 (d). This fall, we held joint public engagement sessions with DHEC staff. Consumers attending these sessions were encouraged to provide their thoughts and ask questions about both plans.

Our responsibilities arising from the Distributed Energy Resources (DER) Program Act, also known as Act 236, are also keeping us busy. Third-party solar leasing is underway, and we are encouraging anyone considering going solar, whether leasing or buying solar panels, to become educated about the process. Act 236 mandates that the interconnection standards of the electric IOUs be revised, and we continue to work with stakeholders toward the goal of reaching consensus on new standards.

During the year, the net metering rates for Duke Energy Progress (DEP), Duke Energy Carolinas (DEC), and SCE&G were approved. As a result of Act 236, eight proceedings were filed and completed, with as many as 17 parties to each case. In every one of them, the ORS was able to facilitate a consensus among the parties such that no contested issues remained. That accomplishment was remarkable and the result of hard work and patience by all involved.

A very complicated and public issue that arose this year was the proposed construction by Duke Energy of a substation in Campobello, S.C. and the proposed siting of a 45-mile transmission line between Asheville, N.C. and the new substation. The proposal drew the interest and ire of landowners in the affected area.

While the process of gathering the necessary information caused concern for some, the result was in the public interest. In November, Duke Energy announced that the Foothills transmission line and Campobello substation were no longer needed for its revised Western Carolinas modernization plan. The ORS, Duke Energy, and the landowners worked closely together to reach this resolution; the resulting plan was clearly better for all.

In promoting economic development, the ORS provided letters of support for electric contracts with various companies that expect to invest a total of approximately $1.88 billion and create more than 2,000 jobs in South Carolina over the next several years. Settlement of cases in 2015 resulted in over $60 million in savings to consumers, which also contributes significantly to economic development.

Throughout the year, the ORS continued to monitor both the construction progress and associated costs at the VC Summer Units 2 & 3 (Units) nuclear construction site. In October, SCE&G announced an amendment to the contract for construction of the Units. Under this amendment, the total project cost for SCE&G will increase by approximately $286 million over the $6.827 billion previously approved. This will bring the total gross construction cost of the project to approximately $7.113 billion. This total compares to the originally approved project cost of approximately $6.3 billion (SCE&G's portion).

In addition, this amendment provides SCE&G an exclusive and irrevocable option to (at any time prior to November 1, 2016) further amend the contract to fix as of June 30, 2015 the total amount remaining to be paid for the entire scope of work on the project (excluding amount of work within the time and materials component of the contract price) at approximately $3.345 billion (SCE&G's 55% portion of $6.082 billion). Exercising this option would bring the total gross construction cost of the project to approximately $7.601 billion (SCE&G's 55% portion).

SCE&G intends to file for approval next spring at about the same time it files for its annual request for revised rates. This scenario is similar to what occurred this year, which caused confusion and calls for amending the Base Load Review Act. We continue our review of the amendment.

Due to the construction delays and budget increases that have occurred, we also determined it was reasonable to have an independent analysis conducted to determine whether the revised rates provision under the BLRA that is being utilized for construction of the V.C. Summer Units by SCE&G is cost beneficial to customers. The firm of Elliot Davis Decosimo, LLC is currently working with SCE&G and progressing through this review. SCE&G has been cooperative with the auditors in this process.

The Pipeline Safety Program continues to be successful in achieving natural gas operator compliance by maintaining a cooperative working relationship with natural gas operators. Most natural gas incidents in South Carolina are caused by third-party damage and, to help remedy that situation, the ORS once again promoted *National Safe Digging* Month in April. The audit of the Pipeline Safety Program for Calendar Year 2014 by the Pipeline and Hazardous Materials Safety Administration resulted in scores of 48 out of 50 for the Progress Report and 99 out of 100 for the Program Evaluation.

The Rail Safety Program worked to ensure that South Carolina's rail system remained safe. Derailments involving either the actual or potential release of hazardous materials prompted the Federal Railroad Administration to promulgate new rules and regulations regarding tank cars and emergency notification to first responders. At the request of the SC EMD, the ORS produced a summary of the new tank-car rules and briefed county first responders on how to correctly respond to rail incidents involving hazardous materials. Rail staff continues to assist with issues arising from the flooding in early October, which damaged track infrastructure and also eroded land surrounding the tracks.

Another topic of interest in rail safety is Positive Train Control (PTC). PTC is, in essence, an accident-prevention system that Amtrak and most trains that travel on any main lines will be required to have. While it is supposed to be in effect by the end of 2015, a bill was passed in Congress in October that allows an extension to this deadline until 2018. This extension will allow the rail companies more time to retrofit trains to meet the requirements.

During 2015 the SC Telephone Coalition filed to have the PSC review whether or not wireless phone service competes with wireline phone service. If it is determined that the services compete with each other, then according to current state law wireless carriers will be required to contribute to the State Universal Service Fund.

Throughout the year, the ORS provided oversight for the transition to optional and then to mandatory 10-digit dialing in the 843 area code region and, finally, to the introduction of the new 854 area code in that region. Our assistance included the development of FAQs posted on our web site as well as a press release informing consumers of the transition, which generated considerable media interest and coverage by several news outlets in that portion of the State.

The SC Equipment Distribution Program had a busy year of outreach and providing services to our hearing- and speech-impaired citizens.

The ORS Telecom and Audit Departments have been tasked with monitoring the participation of telecommunications companies in the Universal Service Fund, the Interim LEC Fund, and the Dual Party Relay System. To date in 2015, our auditors have examined 85 filings under these telecommunication programs to ensure conformance with program requirements. Several examinations, currently in process, will be completed before year-end.

Our Transportation Department has remained diligent in conducting inspections, site visits, and resolving complaints related to passenger and household goods motor carriers (HHG). A continued upward trend in new entrants into the HHG arena has kept the Transportation Department busy with site visits and hearings.

The ORS hosted educational forums for our transportation carriers and our water/wastewater companies. The focus of the transportation forum was on best practices in the household goods moving industry. Sixty representatives of approximately 50 companies were in attendance. Attendees expressed a desire for the forum to be held annually, rather than bi-annually as has been done in the past. The Water/Wastewater workshop provided valuable information to over 40 company representatives on trends in the water and wastewater regulatory arena as well as helpful tips on maintaining compliance.

Three water/wastewater rate cases involved a great deal of preparation and time throughout the year. Carolina Water Service filed a rate case as its consolidated entity on June 30, 2015. After months of hard work by our staff, including attendance at several night hearings, the case was settled in November, thus saving customers over $1.5 million. The other two rate cases – Daufuskie Island Utility Company, Inc. and T.J. Barnwell Utilities, Inc. – were also settled. The Daufuskie settlement produced savings of over $700,000.

Thanks to the hard working staff in the Consumer Services Department, many consumers recovered funds due to erroneous charges, refunds of deposits, unauthorized charges, incorrect rate being charged, or dispute about charges. Although there was much more recovered throughout the year, the following indicates the highest amounts recovered during this year:

- $12,800 due to energy theft
- $9,117 due to erroneous charges
- $7,650 due to unauthorized pass-through charges
- $3,168 due to erroneous charges
- $2,440 due to misapplied rate

Consumer Services staff partnered with community organizations around the Midlands to host events in recognition of National Consumer Protection Week. We also distributed 18,900 brochures this year to 60 community assistance agencies around the State on a variety of topics including electric and natural gas safety net, winter heating, and basic utility rights. The mail-out also included 900 copies of the SC Emergency Management Division's *Severe Winter Weather Guide*.

ORS members added valuable certifications to our team. Two auditors and a member of the Electric staff earned their Associate Public Manager certifications through the S.C. Office of Human Resources. One of our Pipeline Safety inspectors completed his federal certification to be a fully certified inspector, and one of our rail inspectors became certified in Operation Lifesaver to give presentations to schoolchildren and other groups on safety at railroad crossings.

Best Wishes to you and your family for a warm and wonderful holiday and a prosperous New Year.

Sincerely,

C. Dukes Scott
Executive Director

January 31, 2016

NAME
ADDRESS
CITY, STATE ZIP

Dear NAME:

We began the New Year with a winter-weather EMD activation on January 22nd and 23rd. At the height of winter storm Jonas, 31,000 outages existed, mostly in the service areas of Duke Energy and Blue Ridge Electric Cooperatives. The ORS EMD team put in a total of 71 man-hours while activated. During this event we found that changes we implemented after the October flood event, such as a reduction in EMD shifts from 12 to 8 hours, work well for us. In a related matter, the electric cooperatives and EMD are attempting to integrate their outage-reporting systems; we are helping to facilitate this process. We continue to participate in a recovery task force for the October flooding event.

The ORS continues to receive contacts from consumers and members of the General Assembly concerned that broadband is not readily available. Broadband service, rates, and availability are not regulated by a federal or state agency. Nevertheless, the ORS is monitoring the contacts received related to broadband availability in an effort to provide information to you.

Westinghouse Electric Company, LLC (Westinghouse) completed its acquisition of CB&I Stone & Webster, Inc. (Stone & Webster), the nuclear construction and integrated services business of Chicago Bridge & Iron N.V. (CB&I). Stone & Webster will now reside within a newly created Westinghouse subsidiary called WECTEC. This acquisition means Westinghouse and its subsidiaries are responsible for the design and construction of SCE&G's Units 2 & 3 (the Units) at its V.C. Summer plant in Jenkinsville, SC. Westinghouse has engaged Fluor Corporation (Fluor) as a subcontracted construction manager.

We are concerned that Fluor is functioning only as a subcontracted construction manager and has not assumed full responsibility for the craft labor on the site. If the productivity and efficiency gains required to complete this project in a timely manner and within budget are to be realized, Fluor will need to leverage its vast experience in this area through utilizing specific work processes and management controls, which will be difficult if it is not granted direct responsibility for the craft labor.

Inventory storage and control present one of the major challenges to successful completion of the Units. ORS understands that a complete site inventory and re-verification of the site warehouses and lay-down areas will be performed. This effort will assist the project in properly staging equipment and commodities to support ongoing construction activities.

We believe SCE&G intends to take a more active role in ensuring that construction work packages are properly prepared and complete, which includes the proper staging of the required equipment and commodities. One of the most significant drains on project construction productivity has been the inability to maintain the craft focused on a work activity due to incomplete or inadequate work packages and material availability. Ensuring accurate and complete preparation of construction work packages should be a top priority that is continually monitored.

We received the results of an independent analysis conducted by the firm of Elliott Davis Decosimo, LLC with regard to the Units. The analysis was conducted to determine whether the revised rates provision under the Base Load Review Act (BLRA) utilized by SCE&G (the Company) for construction of the Units is cost beneficial.

The results of the Elliott Davis Decosimo analysis confirm that the revised rates methodology under the BLRA is cost beneficial to customers. In addition to being in the customers' financial interest, the BLRA is in the State's public interest. The cost savings, as confirmed by the Elliott Davis Decosimo analysis, and the coverage of cost of capital under the BLRA allow for the construction of a reliable, greenhouse-gas free source of generation for decades to come.

The analysis confirmed that, in accordance with the BLRA, allowing the Company to establish annual revised rates and collect additional revenue during the construction of the Units will reduce the total costs to construct the Units by approximately $1 billion, compared to accumulating the financing cost over the life of the construction of the Units. In addition, the aforementioned reduction in total construction costs will reduce future depreciation and cost of capital of the Units by approximately $4 billion over the Units' estimated 60-year life.

Further, representatives of Elliott Davis Decosimo told us in conversation that, by their analysis, the benefits may be even greater than what is stated in the report. Specifically, allowing the Company to establish annual revised rates and collect additional revenue during the construction of the Units (in accordance with the BLRA) will reduce the total costs to construct the Units by approximately $1.682 billion. Also, the aforementioned reduction in total construction costs will reduce future depreciation and cost of capital of the Units by approximately $5.8 billion over the Units' estimated 60-year life.

We continue to work on the State Energy Plan. In order to facilitate its development, we have formed an advisory committee made of those with diverse interests. Working subgroups will be formed to address different aspects, and ultimately we intend to receive public input. I am pleased with the positive response from those involved and their willingness to serve.

As noted in the October and November letters, Palmetto Clean Energy (PaCE) was seeking to distribute approximately $1.4 million in grants to multi-family shelters/transitional homes or K-12 educational institutions. To date, the PaCE board of directors has approved the awarding of 24 grants representing approximately 500 kilowatts of new solar capacity and totaling $1.4 million. The awards benefit a variety of low-income and/or at-risk populations as well as several schools across the State.

Staff continues to work with stakeholders in planning for the EPA's 111(d) State Implementation Plan, or SIP. The ORS filed comments on January 21st with the EPA and continues to work with stakeholders in identifying how energy efficiency can be used to comply with 111(d) and how to best quantify the savings that may result.

We are working with stakeholders on Duke Energy Carolina's (DEC) and Duke Energy Progress' (DEP) avoided-cost tariff filing. In January, the ORS hosted a stakeholder meeting that was attended by representatives of the companies, solar developers, and conservationists. All interested parties will file comments with the ORS regarding their positions on the issue. A negotiation meeting is scheduled for March 9th at the ORS office.

Act 236 mandates that interconnection standards be developed for the electric investor-owned utilities. Toward this end, we continue to have discussions with stakeholders regarding these standards and hope to have a recommendation in the coming weeks.

Solar leasing via Act 236 is well underway. ORS representatives met with SCE&G to better understand the process by which consumers and leasing companies can receive Distributed Energy Resource (DER) incentives. The ORS issued a certificate to a solar leasing company in January, thus bringing the total to six. We are currently reviewing two other applicants.

In rail safety, staff participated in a passenger train emergency response exercise with the City of Columbia fire department. Routine inspections occurred around the State.

In Pipeline Safety, our newest inspector attended training in Oklahoma City from January 4-8 as he works toward his federal certification by the Pipeline and Hazardous Materials Safety Administration. Staff attended Utility Coordinating Committee meetings in several locations and conducted transmission-comprehensive inspections (currently the topic of focused inspections) in Anderson, Greenville and Spartanburg (for Piedmont Natural Gas) and in Aiken, Columbia, Abbeville, Myrtle Beach, Beaufort, Charleston, and Sumter for SCE&G.

The S.C. Equipment Distribution Program continued its outreach around the State including visits to several conferences and expositions such as the S.C. Academy of Audiology's annual conference.

Telecommunications staff began the 2016 annual resize process for the Interim LEC Fund by sending a kick-off letter to fund contributors.

Transportation staff continues to conduct both routine site visits and focused inspections around the State. In the past month, site visits for household goods (HHG) carriers were conducted in Rock Hill, Columbia, Myrtle Beach, and Charleston. Because the number of HHG carriers seeking authority to operate continues to increase, we have taken steps to ensure uniformity in our audits across the State, including training for our inspectors that was conducted this month.

Willie Morgan, our longtime manager of Water/Wastewater, has taken on a new role as Deputy Director of Consumer Services and Water/Wastewater. We look forward to Willie's continued excellent work in this expanded leadership role.

Our Consumer Services Department recovered approximately $8,569 for consumers during the past month. The majority of the recovery amount comes from three large recoveries for two electric customers and a telecommunications customer.

If you have any questions or concerns, please feel free to contact me. Thank you for your ongoing support of the Office of Regulatory Staff.

Sincerely,

C. Dukes Scott
Executive Director

March 31, 2016

Name
Address
City, SC Zip

Dear XXX,

The ORS continuously monitors the construction of V.C. Summer Nuclear Units 2 and 3 (Units). The Units, which are AP1000 plants, are evaluated on an ongoing basis for compliance with the approved budget and schedule. These monitoring activities are conducted through our ORS staff, led by Licensed Professional Engineer Anthony James;[1] Allyn Powell, Manager for Nuclear Programs;[2] and Certified Public Accountant Jay Jashinsky. We have also retained Gary Jones as our consultant to assist and advise the ORS.

Gary has over 45 years in the nuclear power industry, including 32 years with Sargent & Lundy (S&L) in Chicago, Illinois, where he served as owner and Senior Vice President for 16 years. He led the design and engineering on three major nuclear plants: LaSalle County (Commonwealth Edison); Marble Hill (Public Service Indiana); and Braidwood (Commonwealth Edison). In addition, Gary has provided engineering, design, and consulting services to over 50 nuclear power plants throughout the United States. He has extensive international project experience in Armenia, Canada, China, El Salvador, Finland, Hungary, Mexico, South Korea, and Ukraine. Gary also spent 2 ½ years with the International Atomic Energy Agency in Vienna, Austria. Gary is a Licensed Professional Engineer registered in Missouri and South Carolina.

As of this date,[3] the following is an ORS assessment of the status of the Units.

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[1] Anthony also has a Master's Degree in Earth and Environmental Resources Management from USC's School of the Environment.
[2] Allyn holds a Bachelor of Science degree in Physics from the University of South Carolina Honors College and a Master of Science in Physics from William and Mary, with an area of study in nuclear and particle physics. Allyn has professional experience coordinating the state budget process for the South Carolina House of Representatives, and she served as lead staff for the South Carolina Governor's Nuclear Advisory Council.
[3] We expect SCE&G to be filing for approval of the executed amendment, dated October 27, 2015, to the contract. This assessment is not an evaluation of the amendment as it is still under consideration and subject to ORS' ongoing evaluation.

In 2008, factors related to the federal and state regulatory and policy environment were favorable for construction of the Units. These factors included:

- An updated Nuclear Regulatory Commission (NRC) regulatory environment under 10 CFR 52, which allowed for issuance of a combined Construction and Operating License (COL) to both construct and operate a plant,
- A modular construction approach that allowed components to be fabricated in large sections, assembled at the construction site, and lifted into place using a crane or derrick,
- A design that would be certified by the NRC,
- Successful construction of similar AP1000 plants in China, with respect to both productivity and fabrication,
- The 2007 Base Load Review Act (BLRA) in South Carolina that allowed stability and eased financing concerns,
- A federal regulatory environment that was increasingly focused on reducing the amount of greenhouse-gas-emitting power generation,
- An expected Unit 2 substantial completion date of April 1, 2016, and
- An Engineering, Procurement and Construction (EPC) contract that was a product of collaboration between the designer and a builder.

Our *actual* experience has been that:

- The federal regulatory environment has not been as good as hoped —
    - The issuance of the combined COL was delayed 9 months until March 30, 2012,
    - NRC oversight during construction has required strict literal compliance with regard to the approved design. This strict interpretation has resulted in the need for License Amendment Requests (LARs),
    - As the Units were the first plants to go through the Inspection, Testing, Analyses, and Acceptance Criteria (ITAAC) process, additional work has been required to define and refine the process, and
    - Experience in China could not be capitalized on as much as anticipated; the NRC offered only limited credit for testing done there,
- Fabricators were unable to reliably meet schedule and quality requirements, which led to the reassignment and de-scoping of fabricators,
- The certified design was not as complete as originally thought. Constructability reviews were inadequate in many cases, thus leading to continuing design changes. Also, compliance issues with codes and standards came to fruition. Change requests caused design alterations and change orders,
- Construction productivity rates were lower than planned and lower than those experienced in China,
- The actual experience with the EPC contract has been that changes in ownership and amendments have led to a less favorable environment,
- Cumulative SCE&G rate increases have occurred under the BLRA totaling $1,054,796,800 to cover the cost of capital associated with the construction,

- Five filings[4] by SCE&G have occurred since its original Base Load Review Order, to delay construction schedules and/or to add to the budget. Budget additions total to date $1.15 billion,[5] SCE&G's share in 2007 dollars,
- The Unit 2 substantial completion date has been delayed from April 1, 2016 to August 31, 2019,
- The BLRA has provided a stable financial environment for construction, and an independent study concluded that it reduces capital costs,
- Subsequent Environmental Protection Agency rulings have placed a greater focus on the need for non-greenhouse-gas-emitting generation,
- Inflation and interest rates have been favorable during the construction, and
- Construction of the Units has created as many as 3,700 jobs, and it is forecasted that approximately 800 permanent jobs will be added when the Units begin generating electricity.

Challenges to the project remain in several key areas, such as:

- Managing the transition between EPC contract holders and integrating the new outside construction manager,
- Module construction, which continues to encounter constructability issues and runs behind schedule,
- Fabrication of some of the most complex structures in the plant has not yet begun,
- Productivity continues to be lower than needed to meet construction schedules,
- Mechanical, Electrical and Instrumentation & Controls installation, which is very complex, still lies ahead, and
- Federal regulatory compliance remains a challenge as—
    - More LARs are processed,
    - ITAAC (873/unit required; 20 on Unit 2 and 16 on Unit 3 submitted) closure remains an area of focus, and
    - The focus moves to operator training and operations-and-support staff readiness.

In conclusion:

- The BLRA methodology reduces costs per an independent study;
- Nuclear is a diverse and non-greenhouse-gas-emitting source of power;
- The project faces significant, but not insurmountable, challenges; and
- Unit 3 will need substantial improvement to meet the deadline for federal tax credits.

The BLRA, as it presently exists, remains an essential element to success. It provides a stable environment that ensures financing. Further, these Units will provide South Carolina with non-greenhouse-gas-emitting power and diversity in power supply, both of which are critical to the future of this State.

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[4] One filing was withdrawn prior to conclusion.

[5] By order of the South Carolina Supreme Court, $438 million (2007 dollars) in contingency was removed from the original budget.

Our work on the State Energy Plan (SEP) continues, and we should have a draft of the SEP available for consideration in the summer.

One of our Railroad Safety inspectors participated in an anti-terrorism joint task force with the Federal Railroad Administration, the Federal Bureau of Investigation, and other law enforcement agencies.

Our Consumer Services Department continues to receive a steady stream of complaints, with most at this time of year related to bill payments. From February 1 to March 24, the ORS recovered for consumers $1,908.35 through resolution of complaints.

The Pipeline Safety Department is promoting *National Safe Digging Month* in April. South Carolina 811 is our state's toll-free one-call notification service to help the general public and professional excavators obtain information on the location of underground cables and mains. Water/Wastewater staff attended South Carolina 811 training to learn about the requirements and notices that apply to regulated water and wastewater utilities.

Duke Energy Carolinas (DEC) and Duke Energy Progress (DEP) are discussing their plans for coal-ash basin closures and the financing of those closures. To avoid a repeat of the spill in Dan River, their plans include removing coal ash from existing ash ponds and moving it to lined landfills. Both DEC and DEP have accruals to use to offset the cost of environmental remediation.

SCE&G filed 4 separate solar contracts to purchase power from solar facilities. The combined size of all 4 facilities from which the utility will purchase solar power is 116.4 megawatts. The solar facilities range in size from 5 megawatts to 71.4 megawatts and are located in Aiken, Allendale, Bamberg, and Jasper counties.

If you have any questions or concerns, please feel free to contact me. Thank you for your ongoing support of the Office of Regulatory Staff.

Sincerely,

C. Dukes Scott
Executive Director

April 29, 2016

Name
Address
City, SC Zip

Dear XXX,

The ORS continuously monitors the construction of V.C. Summer Nuclear Units 2 and 3 (Units). ORS representatives met with Carl Churchman, Westinghouse Vice President and Project Director and Jeff Hawkins, Fluor Vice President and Site Director, to discuss the status of the project and their views on the transition process. This was the ORS' first meeting with Fluor's Site Director. Both provided informative and candid responses to the ORS' questions. They recognize the major issues confronting the project and are working diligently to resolve them. Among the major areas discussed were the following:

- **Craft Labor Transition** – Fluor is in the process of assuming direct responsibility for the craft labor and support personnel previously employed by Westinghouse. The official transition was scheduled to occur from April 2 through April 4. As of April 4, all craft labor that is not otherwise subcontracted will be Fluor employees, even changing to Fluor tan-colored hardhats. Westinghouse will retain some employees at the management level.
- **Area Manager Structure** – Fluor is moving the project to an Area Manager structure, with the Area Manager responsible for all construction work within his or her designated area. There are seven Fluor Area Managers on the construction site. This restructuring brings the project into alignment with industry practices as it is the management concept used on most large construction projects.
- **Commodity Procurement and Availability** – Fluor will now be in charge of commodity procurement and will be responsible for ensuring the correct material is available when needed for construction. This is an area that needed significant improvement, and Fluor has an opportunity to resolve the issues in this area that have hindered construction progress.
- **Process and Procedure Review** – Westinghouse and Fluor are reviewing the major site processes and procedures and are instituting improvements where they find opportunities to do so. They anticipate completing these reviews and putting revisions in place by June 2016.

- **Productivity Improvement Plan** – A productivity improvement plan has been developed that sets goals for productivity factors based on overall sustained project completion of 1% per month by the end of June, increasing to 2% per month by the end of the year, and to 3% per month by the end of March 2017. This plan includes implementing a two-shift schedule, with each shift working ten hours per day, six days per week.
- **Module Suppliers** – A summit meeting with all module suppliers was held March 30, 2016, with the goal of familiarizing suppliers with current requirements and accelerating the production and delivery of quality sub-modules to the site. If successful, it will have a positive effect on module production, which is a critical path activity.
- **Fluor Recruiting Network** – Fluor is using its worldwide network to replace certain personnel and to expand the labor force on site. This process is expected to lead to a significant increase in site staffing in the near future.

The ORS is aware of and concerned about recent news media reports regarding the financial stability and viability of Westinghouse's parent company, Toshiba. ORS and SCE&G are both tracking the situation. Toshiba has taken a number of recent steps to improve its financial situation, including selling non-core business units. The EPC contract contains several provisions to help mitigate the risks associated with Toshiba's financial health. Per the EPC contract, Westinghouse is required to provide letters of credit, calculated annually and based on a portion of the estimated construction costs, if Westinghouse's credit rating reaches a certain level. The EPC contract also contains a provision that allows SCE&G to request that certain intellectual property associated with construction be escrowed. SCE&G is in the process of evaluating the extent to which they would like to exercise this escrow provision.

Sub-module delivery and erection continue to be a major cause of construction delays. Progress occurred on the fabrication of the Unit 2 CA03 module in March, and a portion of the concrete fill of the Unit CA02 module was completed in April. Good progress has also been made on the Unit 3 CA05 module, which is complete and ready to be installed; however, sub-module fabrication for the Unit 3 CA01 module and Shield Building panel fabrication continue to be a challenge for the project. Delivery of Unit 2 sub-modules from all vendors also continues to be delayed.

The work activity level has noticeably increased at the site, and monthly progress is more visible than has been previously observed. The attitude of the craft labor also appears to have improved, as was manifested by many friendly greetings during the ORS' site tour. A positive attitude can benefit the work environment and increase productivity.

While significant challenges to the project remain, Westinghouse and Fluor have added leadership to the project to try to effect the required changes and improve project processes and performance. However, the true impact of these recent changes remains to be seen and will need to be closely monitored over the next several months.

We continue to make progress on the Energy Plan. Our Phase One subcommittees have worked hard to provide excellent information that will form the foundation of the report, upon which the policy can be built. Currently, the information from the committees is being compiled and crafted into a document that will be presented for public comment this summer. I appreciate the help of all involved in this process —we would not be able to accomplish this monumental task without the very capable help of our stakeholders.

SCE&G's electric rates have been reduced to reflect lower fuel costs associated with generating and purchasing power and to allow for recovery of costs associated with promoting energy efficiency programs. The overall 4.5 percent decrease means that residential customers using 1,000 kilowatt hours of electricity per month would see their bill drop $6.74 beginning in May, going from $149.58 to $142.84.

It is expected that this decrease will offset the increase to residential electric rates — to be filed in May and to be effective this fall — related to the two new nuclear units the company is building near Jenkinsville, S.C.

Also in May, SCE&G's residential electric bills will include a new line item labeled, "Renewable Energy Resources." This $0.34 monthly charge (already factored into the above bill calculations) supports the development of programs to encourage customer investment in renewable energy.

ORS staff met with representatives of Duke Energy to discuss Combined Heat and Power, or CHP. The utility is exploring the possible use of CHP to help meet the energy needs of a significant industrial customer; they have also identified other potential customers for CHP. This process would be a benefit to the rate payer in that it would reduce fuel cost by crediting revenue from steam sale back to the utility's fuel cost expense.

Pipeline Safety staff participated in a teleconference on the Pipeline Data Mart, a system established by PHMSA (Pipeline and Hazardous Materials Safety Administration) for state programs to input their safety statistics. Staff also participated in a State Inspection Calculation Tool webinar; this tool is significant because it determines our staffing levels for the pipeline safety program.

Our Pipeline Safety staff continues to gain expertise and to share best practices. The program supervisor attended the National Association of Pipeline Safety Representatives southern region conference, at which he gave a presentation on the status of pipeline safety in South Carolina. One of our inspectors has participated twice this month in federal training in Oklahoma City.

The Deputy Director of Safety and Transportation is drafting a letter to go out from the SC Pipeline Emergency Response Initiative (SC PERI) to fire chiefs and other first responders in the State asking them to participate in the SC PERI initiative. He also gave a presentation at the Utility Public Safety Alliance national conference in Charleston regarding ESF 12's emergency management responsibilities.

The Emergency Management Division, electric cooperatives, and the ORS are collaborating on a project to improve the mapping tools used at EMD.

ORS Consumer Services investigated 210 consumer complaints and inquiries in the past 30 days and recovered a total of $3,025. Of this total, notable amounts recovered for individual consumers are as follows:

- $1,247 for a Duke Energy Carolinas customer due to resolution of bill responsibility
- $610 for a Duke Energy Carolinas customer due to resolution of bill responsibility

The Water/Wastewater department held its annual water/wastewater workshop on April 15th at the PSC. Over 40 attendees benefited from the useful industry information provided for them at the workshop. Commissioner Howard and I spoke at the event, as did several technical experts.

If you have any questions or concerns, please feel free to contact me. Thank you for your ongoing support of the Office of Regulatory Staff.

Sincerely,

C. Dukes Scott
Executive Director

May 31, 2016

Name
Address
City, SC Zip

Dear XXX,

In addition to our monthly site visit and document activities, the ORS is in the process of reviewing SCE&G's supplemental responses to the request for records and information that was issued on March 4, 2016 regarding the October 2015 amendment (Amendment) to the Engineering, Procurement and Construction Agreement for the construction of V.C. Summer Nuclear Units 2 & 3. Thus far during our review process, the ORS has identified the following concerns:

> Costs shown in the Amendment are the result of a negotiation and do not represent a detailed accounting of the costs associated with each and every remaining project activity. Thus far, no rigorous and detailed comparative roll-up of the final costs is available. This presents a challenge as the ORS evaluates and assesses the project costs presented in the Amendment. It is unclear in some cases how the costs in the Amendment interface with cost increases in Order No. 2015-661, particularly in the area of Estimated at Completion costs, commonly referred to as "EAC." The ORS continues to work with SCE&G in an effort to obtain a clear path for the dollars in the Amendment, with documentation.
>
> The construction schedule, and in particular the Unit 3 construction schedule, remains an area of concern. The currently available Project Integrated Schedule has several major activities with artificially held and constrained dates that do not adequately reflect the impacts of delayed precursor activities. Last month, this schedule still supported the Guaranteed Substantial Completion Dates from the Amendment of August 31, 2019 for Unit 2 and August 31, 2020 for Unit 3. Recently, however, the estimated completion dates have moved out to November 2019 for Unit 2 and September 2020 for Unit 3. Movement with respect to the completion dates is not abnormal as schedules are revised and mitigated; however, these changes in the early stages of the transition warrant attention. The number of mitigation strategies being employed— in addition to the fact that a detailed schedule including Fluor's complete input for both activities and

resources is not expected to be available until the fall— is a cause for concern. The ORS believes that additional delays may be identified in the project completion dates, especially in Unit 3. These factors make it difficult for the ORS to evaluate the reasonableness or prudency of the proposed schedule changes associated with the Amendment. The ORS continues to meet monthly with Westinghouse Electric Company (WEC) scheduling personnel and SCE&G regarding the status of the schedule.

SCE&G's 1st Quarter 2016 Report includes several estimates for proposed change orders and discussions regarding proposed changes to Owners' Costs. It is challenging for the ORS to evaluate costs associated with unsigned change orders because the backup documentation is not typically complete until a change order is signed. As such, the ORS did not previously have the opportunity to evaluate these estimates. The ORS currently is working with SCE&G to obtain all available backup documentation to support these potential change orders.

With regard to construction progress on the project, the ORS has observed the following:

Positives

- SCE&G completed the concrete fill within the walls of the Unit 2 CA20 structural module on April 5. As the first concrete fill of a major structural module on the site, completion of this item is a significant accomplishment.

- All 17 submodules on Unit 2 CA03 are now standing upright on the stand in the fabrication tent on site, and final welding and outfitting of the module are underway. The module is on schedule for placement in the containment vessel in June.

- Newport News Industrial has made good progress in meeting their most recent schedules for delivery of Shield Building (SB) panels, and the erection of Course 4 of the SB panels has been completed at the construction site.

- Progress has been made on the on-site fabrication of the Unit 3 CA20 module, subassemblies 1 & 2, in the Module Assembly Building (MAB) that supports an August 2016 placement date. Some recent setbacks relating to welding have been identified, but these issues are in the process of being addressed. All 72 submodules for this module have been delivered to the site, and subassemblies 3 & 4 have already been placed in the Unit 3 Auxiliary Building.

- Progress was evident in the MAB on the Unit 3 CA01 module. Six submodules were erected on the stand in a single week in April, which represents the highest production yet on this activity.

- Unit 3 Containment Vessel Ring # 1 installation was completed on April 13.

- Unit 3 CA05 module was set on May 4.

Concerns

- SCE&G received notification on April 21 from WEC of a quality paperwork issue with Mangiarotti components already delivered to the site. The issue involved sub-suppliers of safety-related pressure boundary materials and had the potential to impact the accumulator tanks, core make-up tanks, pressurizers, passive residual heat removal (PRHR) heat exchangers, flued heads, and guard pipes. Currently, the only identified potential impact is to the PRHR heat exchangers. This issue may be a 10 CFR Part 21 reportable infraction.

- The repairs to Turbine Building Bay 1 relating to an unacceptable concrete cold joint have been significantly delayed and are not progressing well. The hydrolasing contractor, who had been removing concrete from the affected area, did not meet promised productivity levels. SCE&G has ceased hydrolasing activities and is now pursuing alternate paths to resolve this issue.

- Progress on the Turbine Buildings continues to be significantly behind schedule (up to 6 months late in some cases), primarily due to craft labor shortages and diversion of labor to Nuclear Island work. SCE&G is working with Fluor and the nuclear construction organization within Westinghouse (WECTEC) to address this issue.

- Continuing commodity shortages have resulted in delays. Fluor is scheduled to assume greater responsibilities in commodities purchasing and control. Commodities had previously been procured on a "just-in-time" basis. The visibility of commodity needs on construction planning documents has been enhanced. As Fluor's role in the project increases, commodities purchasing and control is an area with opportunities for improvement.

- Construction labor productivity rates and overall productivity improvements have not yet significantly increased, although the activity levels have increased. Craft labor manpower increases will need to occur soon in order to support project completion dates. Process changes in several areas such as welding, procurement, and work-package preparation and closure will also soon need to be implemented to meet completion schedules.

- Progress in completing the areas of the Unit 2 Auxiliary Building that support the SB panels, commonly referred to as the Reactor Containment Areas, has been problematic, primarily due to design changes and commodity shortages. This area is very near critical path and needs additional focus and effort.

- Mechanical module delivery continues to fall behind schedule. As a result, SCE&G and WECTEC are considering moving more fabrication to the site. While this may improve quality and provide better support construction, it will increase the demands on craft labor on-site and may increase project costs.

More activity and project progress were visible during this site visit; however, challenges remain and the full benefits of the transition to the new contracting arrangements are yet to be realized.

We consistently examine our organizational structure to enhance our representation of the public interest in utility matters. Recently, we have implemented changes to improve our service delivery and streamline our business processes. I am pleased to announce the formation of the Utility Rates & Services Team. The Utility Rates & Services Team performs a wide variety of analytical, research, and compliance duties in support of investor-owned electric, natural gas, water and wastewater utility program areas; these duties include the provision of consumer assistance, complaint mediation, and education.

This new Team is comprised of an experienced leadership staff including:

- Dawn Hipp, Director of Utilities, Safety & Transportation. Dawn is a 12-year veteran with the ORS and is currently responsible for daily operations of the Utility Rates & Services Department and the Safety & Transportation Department.
- Willie Morgan, Deputy Director of Utility Rates. Willie is a registered Professional Engineer and is responsible for the regulatory analysis performed to support the various filings of the investor-owned electric, gas, water and wastewater utilities.
- Michael Seaman-Huynh, Senior Regulatory Manager. Michael continues as the lead regulatory analyst responsible for electric fuel proceedings and economic development contract review.
- Sarah Johnson, Deputy Director of Utility Services. Sarah joins the ORS with experience in de-regulated gas market analysis and telecommunications tariff design. Sarah's team will provide consumer education, complaint mediation, and education as well as analyze and research the renewable, demand-side management and energy efficiency programs of the electric utilities.
- April Sharpe, Consumer Services Program Manager. April has been in her role as the supervisor of the Consumer Services department since the ORS was created. Her team of 4 investigators will continue to assist consumers with their questions and complaints related to investor-owned utilities.
- Robert Lawyer, Senior Regulatory Manager. Robert has been with the ORS 9 years in the Auditing Department. His financial review experience will be an asset to the projects he will manage including review and analysis of investor-owned utility distributed energy generation programs, solar leasing, demand-side management and energy efficiency.

Staff has also been hard at work in preparing for the Duke Energy Progress fuel case; the hearing is scheduled for June 9th. Thus far, we have finalized our review and recommended an adjustment of $73,000. This adjustment was due to removing some purchased power costs as a result of an extended outage at Brunswick Unit 2 in North Carolina. Based on the ORS' analysis, an average residential customer using 1,000 kilowatt hours monthly would see a $2.77 decrease in their monthly bill, which equates to a 2.64% decrease.

In May, the ORS certified an additional two solar leasing companies. Both of them are serving the small, non-residential customer segment. Currently, 10 solar leasing companies are certified, and 8 applications are pending.

We continue to make progress on the Energy Plan. A first draft of the Phase One report is now in the hands of our Editorial Board. We should be on track to have a document ready for public engagement and comment by late June. I appreciate the help of all involved in this process — we would not be able to accomplish this monumental task without the very capable help of our stakeholders.

We are participating in the SC Pipeline Emergency Response Initiative (SC PERI). Our office is revising a draft letter to be sent from SC PERI to fire chiefs and other first responders around South Carolina requesting their participation in this initiative. We anticipate that the letter will go out in early June.

ORS Rail and Safety representatives are collaborating with the SC Emergency Management Division for an exercise that will occur in June. This exercise will simulate conditions similar to what occurred in the 2005 rail incident in Graniteville, South Carolina, but will occur in Aiken. While Graniteville was the result of a mechanical error, this exercise will be cast as an act of terror and will involve a spill of chlorine and acetone.

Over $3,000 was recovered on behalf of consumers during May through the efforts of our Consumer Services department, which processes consumer complaints and inquiries. Some of the notable recoveries for consumers include the following:

- $655 that was billed incorrectly to the customer
- $1,049 via reduction of the back-billed amount to the customer
- $785 due to removing this amount from the customer's responsibility

If you have any questions or concerns, please feel free to contact me. Thank you for your ongoing support of the Office of Regulatory Staff.

Sincerely,

C. Dukes Scott
Executive Director

July 8, 2016

Name
Address
City, SC Zip

Dear XXX,

The ORS is currently in a heightened state of concern regarding the construction cost overruns and schedule delays for V.C. Summer (VCS) Nuclear Units 2 & 3 (the Units). Our concerns are outlined below and include SCE&G's responses:

1. ORS Concern: Westinghouse and Fluor continue to struggle with craft labor productivity. While a slight improvement was shown during the first three months of Fluor's tenure on site, the most recent two months have trended negatively. Furthermore, the project has not attained the improved productivity factor of 1.15 that was anticipated in the approved schedule and budget in Order No. 2015-661. Fluor's efforts to implement process changes through their Functional Area Assessments and subsequent improvement recommendations appear to be a step in the right direction; however, the assessments and the associated implementation of identified improvements are moving much too slowly. This effort needs to accelerate dramatically if the project is to meet its scheduled completion dates.

   SCE&G Response: SCE&G asserts that SCE&G and Santee Cooper have initiated an effort with Westinghouse and Fluor to align the four companies on the top five project focus areas; the productivity factor will be addressed in one of these five areas, which is construction efficiency and schedule adherence. Fluor has analyzed the Shaw and CB&I Power project controls system and determined that it is necessary to convert the project to Fluor's controls system. Once completed, a more meaningful productivity factor can be monitored and used to identify issues by discipline/area and to more accurately predict resource needs. SCE&G anticipates that initiatives in the other four top focus areas—prevention and timely resolution of design issues, modules, construction resources, and procurement—will also improve the site craft productivity factor.

2. ORS Concern: Fluor's recruitment efforts to increase craft labor are not meeting the targets required to support construction, and the year-end goal of increasing on-site craft labor by 1,000 is in jeopardy. Fewer applicants than needed are applying, and rejection rates are higher than expected due to a number of factors including lack of qualifications, failed

background checks, and no-shows. Candidates are also taking other jobs they consider more attractive. This shortage of labor also places the substantial completion dates in jeopardy.

SCE&G Response: SCE&G replies that construction resources is a top five project focus area and that Fluor has provided metrics on recruiting and attrition to a much higher level of detail and greater depth than previously provided by CB&I. SCE&G further informs ORS that Westinghouse and Fluor are in the process of pursuing a number of mitigation strategies to increase the number of craft labor personnel including, among other things, evaluating craft compensation packages (mobilization, pay rate, per diem, retention incentive, etc.) against current markets for each discipline; subcontracting to augment direct hire craft; and relocating demobilized craft at other Fluor projects to V.C. Summer.

3. ORS Concern: Although not yet reflected in the latest project progress reports, concern exists about the recent upturn in job-related injuries and incidents. In some instances, this trend appears to be the result of a declining safety attitude among the craft workers, along with uncertainty surrounding the new project management structure and the divisions of responsibility. Issues of this type need to be immediately addressed and resolved.

   SCE&G Response: SCE&G asserts that, even with the recent job-related injuries, the site OSHA statistics are below industry standard for a large industrial construction project and that safety metrics of TRIR and DAFW are improved over last year. SCE&G is continuing to provide a high level of industrial safety oversight and, in response to the recent injuries, Westinghouse and Fluor are working to improve the safety awareness at the site by, among other things, involving executive leadership in Health Safety and Environmental (HSE) meetings and audits; increasing HSE field presence; and increasing field observation from field non-manual personnel utilizing the Hazard Elimination Card Program.

4. ORS Concern: The lack of availability of key commodities continues to plague the project and result in construction delays. Note that this issue is not tied to major components, as most of these are now on-site far ahead of their actual construction need date. The commodities in question are rebar, welding rod, standard structural steel, bolting, lubricants, steel plates, Nelson studs, and other standard construction commodities. These shortages are the result of Westinghouse's "just-in-time" approach to the ordering and delivery of these commodities. This approach has proved to be ineffective as the components are not available when required. On large construction projects, such commodities are routinely stocked in sufficient quantity to ensure they do not delay construction. Our consultant states that he has never worked on a nuclear project that was delayed by the lack of availability of standard rebar. At VCS, standard rebar unavailability has resulted in construction delays of critical path activities.

   SCE&G Response: SCE&G states that SCE&G, Santee Cooper, Westinghouse, and Fluor all agree that procurement is a top five focus area for the project. To address availability of key commodities, Westinghouse has recently consolidated the responsibility for delivery of material and equipment into a single organization so that each commodity now has a single point of accountability for scope, schedule, and budget. This organizational transition was completed at the end of June 2016.

5. ORS Concern: Other procurement issues, primarily associated with the negotiation of subcontracts and change orders, are becoming critical. SCE&G and Westinghouse have been able to reach agreement on only a few of the issues identified in Exhibit C of the October 2015 Amendment in

the intervening eight months. In addition, delays in the full authorization of several key subcontracts are putting the substantial completion dates of the project at risk.

SCE&G Response: SCE&G replies that, as issues are identified during the project, evaluations are conducted and the parties first attempt collaborative resolution through technical reviews and discussions. The ten issues identified in Exhibit C of the October 2015 Amendment follow this standard process. It was never anticipated that this process would be concluded and these issues would be resolved in eight months. As of June 2016, a change order is pending for two of the ten issues, and SCE&G does not anticipate that the remaining eight issues will have an impact on the project's substantial completion dates. It is possible, but not certain, that a change order will be required for some of the remaining eight issues. Regarding the overall change-order process, SCE&G sent a letter in June 2016 to Westinghouse reiterating previous concerns and requesting that they review their process so that the overall change-order process could be improved.

6. ORS Concern: Consistently meeting the construction schedule continues be a significant issue for the project. This area must improve if any credibility is to be assigned to the current substantial completion dates and associated mitigation strategies that must be implemented in order to bring the plant to completion.

   SCE&G Response: SCE&G asserts that construction efficiency and schedule adherence, including consistently meeting productivity factor, is a top five focus area for the project. SCE&G implemented a Project Management Organization (PMO) this year specifically to provide increased oversight of the project schedule by working with the Westinghouse PMO, which has resulted in the Westinghouse PMO adding key monitoring and reporting of the site milestones and covering schedule mitigation activities on a daily basis. Initiatives in other focus areas should improve the site's ability to meet the schedule.

7. ORS Concern: Module fabrication and delivery continue to drive the critical paths for the project; however, the focus is gradually shifting from structural modules to mechanical modules and structural steel modules in the Nuclear Island. In addition, the transition areas at the Shield Building to Auxiliary Building roof and the air inlet/tension ring areas of the upper Shield Building are becoming increasingly important. Contracts need to be finalized, and fabrication releases need to be expeditiously forthcoming in order to avoid schedule impacts. As it is, because these contracts have taken so long to be finalized, these items will be on a very tight schedule with little margin.

   SCE&G Response: SCE&G asserts that modules, including fabrication and delivery, is a top five focus area for the project. In addition, SCE&G asserts that it maintains its on-site presence at key module vendors, has recently increased oversight efforts, and is working daily with Westinghouse personnel to align priorities, reporting, and mitigations. According to SCE&G, Westinghouse has given suppliers advance authorization to fabricate the Shield Building roof steel and Air Inlet/Tension Ring panels. Westinghouse is also reporting weekly to SCE&G on contract finalization for upcoming scopes of work and has increased authority levels for more than 30 engineers to resolve issues to improve supplier response times. Finally, Westinghouse has moved the responsibility for structural steel procurement from the commodity delivery organization to the module organization to aid this procurement.

8. ORS Concern: Concerns about the schedule also extend to the installation of components such as piping erection, cable raceway installation and cable pulling, instrumentation and tubing installation, HVAC equipment and ductwork installation, and wiring and termination. Historically, these areas have been the most difficult to complete when constructing nuclear power plants; however, very little of this effort has been completed on the Units. The modular construction

methodology may prove beneficial in this regard, but that remains to be seen. The tendency toward slow installation exhibited thus far is especially concerning in light of the project's inability to meet the construction schedule to date. Sustained installation rates will need to be demonstrated before the ORS has confidence in the project's ability to complete these areas in a timely manner.

SCE&G Response: SCE&G replies that it is currently performing an assessment of installation of components on the CA03 module to identify efficiency gaps and will communicate improvement opportunities to Westinghouse and Fluor.

9. ORS Concern: Design changes continue to adversely affect fabrication and construction schedules. The number of design changes appears to be high considering the design completion status that the ORS understood in the early stages of the project. The factors driving these changes need to be further investigated, and additional management controls need to be established with the goal of reducing the frequency of design changes to only those that are absolutely required.

   SCE&G Response: SCE&G states that prevention and timely resolution of design issues is a top five focus area for the project. Westinghouse and Fluor are undertaking advanced planning initiatives to maximize early identification and resolution of potential issues; increasing accountability to build as designed where practical and ensure alignment between construction and engineering; and focusing engineering resources on critical areas. The use of field engineering resources and "clash" software by Westinghouse and Fluor is beginning to pay dividends. A recent example is a set of four work packages where 111 issues were identified and corrected prior to work commencing, and only four issues were identified after work commenced. In addition, SCE&G is working with Southern Nuclear and the NRC to add a new license condition to allow construction work to proceed at risk where a License Amendment Request (LAR) is needed.

10. ORS Concern: Operational readiness is also emerging as a concern. It is not clear at this point whether the required number of operations staff will be ready to perform the required testing and start-up support activities. The operational readiness schedule has not yet been incorporated into the integrated project schedule, so the true impact is not yet known. In addition, questions remain regarding the availability of the final Plant Reference Simulator in time to support operator training and procedure completion. Testing and operations procedure completion in time to support fuel load and commercial operation is also a concern.

    SCE&G Response: SCE&G replies that an Integrated Operational Readiness Schedule (IORS) has been well developed and contains over 32,000 operational activities in support of the plant. The Integrated Project Schedule (IPS) is imported from Westinghouse monthly or as necessary into the IORS. This process ensures consistency and alignment with the construction and Initial Test Program (ITP). In addition, a milestone management process with metrics has been established to monitor the readiness of the operating organization's ability to support the Units. Oversight of these activities is provided in a monthly management meeting that discusses milestones and metrics necessary for the transition from construction through plant startup and into plant operations. Ongoing initiatives are in place that continually refine the IORS and IPS schedules.

    In addition, SCE&G asserts that training schedules have been developed to support training and qualification of operators needed for systems testing and turnover. Gap training is anticipated based on design differences between the simulator and the actual plant at time of start-up support activities; training needs associated with the design differences are manageable in the operator continuing training programs. SCE&G further asserts that operations procedure development will utilize Westinghouse simulation facilities to validate newly developed operational procedures. Station simulation facilities will be utilized to support initial licensed operator training and continuing training for operations instructors and licensed operators. Gap training needs will be determined and implemented through operator continuing training. The NRC Commission Approved Simulator (CAS), recently approved for Vogtle, will fully support initial and continuing training needs until the NRC makes the required findings under 10 CFR 103(g). Discussions are ongoing between VCS and NRC regarding the regulatory path to a Plant Reference Simulator.

In light of these concerns, ORS offers the following observations:

ORS Observations: The addition of Fluor as a subcontracted construction manager is a good step; however, Westinghouse still retains all control as the sole contractor. Consequently, Westinghouse controls the project budget, the majority of the project procurement, and makes decisions about which methodology to use when problems arise.

A. ORS Recommendation: The process changes identified through Fluor's Functional Area Assessments need to be accelerated. If properly implemented, these changes should result in improved productivity by the workforce. In addition, the impact of these changes should be quickly assessed and any further improvements must be implemented expeditiously. The first priority should be the implementation of the "Min/Max" approach to purchasing commodities so that construction delays are not caused by the lack of construction commodities which are readily purchased.

   SCE&G Response: SCE&G has scheduled a review of the Functional Area Assessment reports and actions with ORS on July 27, 2016.

B. ORS Recommendation: The design change process also needs further management review and control. Changes should be assessed as to absolute need and impact on construction, and changes not meeting these requirements should not be implemented. SCE&G should be a part of this assessment process.

   SCE&G Response: SCE&G has informed ORS that it has discussed these issues with Westinghouse on a regular basis.

C. ORS Recommendation: SCE&G and Westinghouse also need to come to an agreement on the milestone payment schedule soon. All necessary management and executive focus required to accomplish this goal must be utilized.

   SCE&G Response: SCE&G has informed ORS that it is continuing discussions with Westinghouse, but that if an agreement is not reached, SCE&G can file a claim with the Dispute Resolution Board (DRB), a mechanism created in the October 2015 Amendment to resolve matters such as this one without affecting the progress of the project. Issues presented to the DRB are to be resolved within 60 days.

D. ORS Observation: Any approach to this project that totally excludes Westinghouse is unlikely to be successful for the project. Westinghouse has key design responsibilities for all safety-related and almost all other key systems and components. In addition, they are the primary designers for the physical plant itself, including the structural and mechanical modules. Westinghouse must be a part of the project if there is to be any hope of successfully completing it. In some areas, a more experienced architect/engineer might provide needed assistance which could be pursued in conjunction with Westinghouse. However, no successful scenario exists that totally excludes Westinghouse's participation.

SCE&G Response: SCE&G has informed ORS that it recognizes the need to keep Westinghouse fully engaged in the project. In the October 2015 Amendment, SCE&G negotiated new terms that SCE&G believes provides for the active involvement and attention of Westinghouse throughout the project.

ORS Observations: In the case of Unit 2, ORS believes that, while the date in the filing of August 31, 2019 is unlikely to be met, it is possible that Unit 2 may still be able to qualify for the Federal Production Tax Credits (FPTC) that expire on December 31, 2020. However, completing Unit 2 in time to receive the FPTC will require improvements to the current construction methodology.

For Unit 3, based on ORS' observations to date, the ORS has a much lower confidence level that this Unit can be completed to meet the current FPTC deadline of December 31, 2020. In addition, Fluor has not completed its schedule assessment and has not prepared a resource loaded integrated project schedule. Only after Fluor completes the assessment will the ability, or lack thereof, to achieve the FPTC deadline become clearer.

Sincerely,

C. Dukes Scott

September 30, 2016

A leak, and subsequent shutdown, of a Colonial Pipeline Company pipeline in Alabama caused gasoline shortages in much of the Southeast. Our office worked with the U.S. Department of Energy, the Energy Information Administration, State EMD, the Governor's Office, county governments, and others to provide information regarding restoration of gasoline to affected areas. At the height of the problem, we were patrolling the entire State to determine which gas stations were affected. Lancaster and York Counties, who receive their fuel from Charlotte terminals, were hit the hardest; North Carolina consumers were crossing the state line to buy gasoline in these counties since North Carolina was in worse shape in terms of shortages. By September 23rd, most of the outages were resolved. I am appreciative to our staff and those of other agencies who worked long hours to help manage this situation effectively.

On August 29, 2016, the ORS submitted its report on SCE&G's annual request for revised rates. On June 27, 2016, SCE&G requested additional revenues associated with the cost of capital (financing costs) related to its investment in constructing V.C. Summer Units 2 and 3. By its filing, SCE&G requested an additional $74,161,000 to recover these financing costs.

Under SCE&G's proposed increase, residential customers served on Rate 8 (the most common residential rate) using 1,000 kWh would pay an average of $148.11 per month. This is an increase of $4.44 from the current average bill of $143.67. Of the $148.11, $27.61 or 18.64% of the bill is attributable to the construction of the Units.

Based on the ORS' examination, SCE&G's request should be reduced by $9,733,000 or 13.12 %. Based on our review and a reduction of $9.733 million to the request, the resulting overall increase to the retail class is 2.66%. Residential customers using 1,000 kWhs would see an increase of approximately $3.86 in their average monthly bill.

The ORS continues to work on the State Energy Plan. Staff is winding down its Phase II subcommittee work which produced over 80 policy recommendations. Staff and the Energy Plan Steering Committee are working to identify a list of top-tier recommendations. These recommendations will be the primary focus of the Energy Office's presentation to the PURC.

As we examine the needs expressed in the State Energy Plan, and the work is continuing, I address here several key issues:

- South Carolina lacks a coordinated building approach to new electricity generation. It is presently not required and, consequently, the State's generation providers plan independently from one another. A coordinated approach could protect the State's electricity consumers from the unnecessary expense caused by an excess in total statewide generation capacity.

- There may be benefits that could be achieved by the joint dispatch of the State's electric generation resources. Duke Energy Carolinas and Duke Energy Progress have demonstrated the savings and efficiencies that can be achieved by coordinating dispatch among their systems.
- We do not have specific recommendations for implementing coordinated building of new generation or joint dispatch of generation resources. Useful recommendations on these issues must result from discussions among all interested parties, especially the State's electricity generators and their customers.
- Today, the process for planning for additional natural gas pipeline capacity begins only when necessary end-user commitments have been finalized. Construction does not begin until the pipeline has been reviewed and approved by all required federal regulatory bodies. This existing process to submit and receive approval to expand or construct a pipeline system can take several years and result in loss of economic development opportunities.

This month, the ORS filed testimony in Docket No. 2016-223-E, SCE&G's request to update the capital cost and construction schedules for the construction of V.C. Summer Units 2 and 3. This testimony supported the settlement agreement reached last month and addressed in last month's letter to you. The ORS continues to prepare for the PSC hearing for this case, scheduled to begin October 4. A night hearing has been scheduled in Columbia regarding this case, which will also be held on October 4.

We continue our review of SCE&G's ongoing construction activities for the Units. Month to month progress is much more evident than in the past.

Fluor continues to make progress towards meeting its staffing goals. It was evident that there were more people working on site and that they were working more deliberately than had been previously observed. Fluor is also planning to supplement its hiring efforts via subcontracts for specific scopes of work. They have seen good results in the one area in which this strategy has already been implemented. While progress has been made, staffing levels at the site remain below those forecasted to be needed, and Fluor faces the need for a large ramp-up in staffing in 2017. This area will need continued focus moving forward. The results of the Functional Area Assessments conducted in the spring are in the process of being implemented, such as the 30-60-90 methodology for preparing work packages for the field. This is an important step toward putting good processes and procedures in place to keep the project on track moving forward.

SCE&G's level of participation in project decision making has increased, as is evident in the Project Management Organization. A recent NRC inspection also yielded positive feedback regarding the safety-conscious work environment, which is important given recent changes in project management. Employees felt comfortable reporting concerns to their supervisors and understood the process for reporting concerns.

While many areas are showing improvement, those improvements are yet to be seen in the project metrics for performance and productivity factors. These metrics have even shown a negative trend in the last month. While improved schedule adherence is important, the ORS is concerned about what these metrics may mean for areas of the plant off of the current critical path for construction. The ORS is looking forward to the availability of the fully resource-loaded integrated construction schedule, which may affect the way these metrics are calculated to more accurately reflect subcontracts and will give us better insight going forward.

The Energy Office sponsored several events in September including Columbia's Electric Tailgate Party, the third annual celebration of *Drive Electric* Week. Hosted by Whole Foods Market and sponsored by the Palmetto State Clean Fuels Coalition, the event was a project of the ORS Energy Office. Activities included plug-in car test drives and rides, children's activities, and electric car technology discussions. The Energy Office also participated in a press conference unveiling the Richland County Public Library's new electric-vehicle charging station. The Energy Office was able to assist the library in arranging for donated equipment to charge electric vehicles belonging to both the library and its patrons.

Director of Energy Policy Anthony James represented the ORS at the *Clean Energy Savings for All Summit*.

Act 236 created a solar leasing program that allows third parties to lease equipment to consumers who want solar but don't have the funds, or don't want to spend the money to purchase equipment. The ORS issues certificates to these leasing companies, assists customers with complaints or questions, and tracks leased equipment installations. Solar leasing applications continue to come in at a steady pace. In September, we received nine applications. To date, we have reviewed 34 applications and approved 17 solar leasing certificates. There are 1,756 leased solar installations to date registered with ORS.

As we prepare for the future with Distributed Energy Resources, an issue that needs to be addressed is how these resources work with the existing grid. The electric grid was designed to accommodate utility owned and dispatched generation that did not vary with the extent to which the sun shined or the wind blew. The electricity being used now was created just a few seconds ago, at a generation plant that an operator must ramp up or down to meet electric demand. Keeping the grid running reliably is a balancing act, where the amount of power put into the grid must equal the amount taken out. The passage of Act 236, the expansion of distributed energy resources, and the variability in output of renewable energy sources like wind or solar power makes maintaining this balance increasingly important; this is where reliability comes into play.

We achieved a settlement in the DEC fuel case, which was signed by all parties including DEC, ORS, S.C. Coastal Conservation League, S.C. Alliance for Clean Energy, S.C. Energy Users Committee, S.C. Solar Development, Southern Current, and S.C. Solar Business Alliance. As a result of this agreement, customers will see a decrease on their monthly electric bills. The decrease for a residential customer will be $5.73, which reduces the monthly bill from $116.57 to $110.84 (assuming 1,000 kWh usage).

Staff is preparing for the DEP rate case. ORS testimony is due on October 7th, and the hearing is October 31st. Preparations have included discussions with SCEUC and other intervenors and site visits to NuCor Steel (also an intervenor), the Robinson nuclear station, and the Brunswick nuclear station.

Transportation staff conducted their quarterly calls with the two TNCs, Uber and Lyft, to discuss any issues they have seen in South Carolina and to check in regarding their compliance.

The Pipeline and Hazardous Materials Safety Administration conducted an audit of the South Carolina's One-Call Law; the ORS participated in the audit, along with SC 811 and the Attorney General's Office.

Consumer Services recovered a total of $2,081 for consumers in the prior month. This total includes the following notable recoveries:

- $1,055 for an electric customer due to clarification of bill responsibility
- $818 for an electric customer due to clarification of bill responsibility

Staff attended the Telecommunications Equipment Distribution Program Association conference where they were able to see firsthand equipment that is available to accommodate wireless and VoIP customers who qualify for SC Equipment Distribution Program (SCEDP) assistance. Beginning in January or soon afterward, SCEDP will be purchasing equipment to fulfill wireless and VoIP customers' needs. Dual Party Relay Fund collections from Wireless and VoIP begin in January 2017, and new equipment distributions will begin shortly after that.

Staff also attended the National Association of State Relay Administrators conference where trends, such as the decline in traditional relay and uptick in video and internet relay, were discussed.

If you have any questions or concerns, please feel free to contact me. Thank you for your ongoing support of the Office of Regulatory Staff.

Sincerely,

C. Dukes Scott
Executive Director

October 31, 2016

Dear NAME:

Last week, the ORS had its annual review with the PURC. We were very gratified and humbled by the many positive comments expressed by PURC members, especially as it relates to our role in state emergency management and our leadership on the State Energy Plan. None of this great work could be accomplished without your steadfast support, and for that we are very grateful.

Once again, our electric providers – SCE&G, Duke, the cooperatives, Santee Cooper, and the municipal systems – responded when we needed them. On Sunday, October 9, 2016, South Carolina reached a peak of approximately 862,000 electrical outages due to the havoc wreaked by Hurricane Matthew. By Friday the 14th, we had only 31,000 outages remaining, an absolutely remarkable restoration. As many as 8,500 line personnel worked through the night, sometimes in adverse environmental conditions, to restore electric service to South Carolinians.

During this crisis, the communication of the utilities with the ORS was perfect, and the coordination among the state agencies was excellent as they worked together for the public good. I met several agency heads during this emergency; we are fortunate to have such high-caliber leaders in these positions.

Through cooperation with law enforcement, we were able to get the utility crews and petroleum trucks into the damaged areas. First responders were there and able to help those in need. Our electric providers worked with us and the Department of Social Services to get SNAP benefits to those who lost food due to the electrical outages. The National Guard was there when needed and positioned a guardsman at the ORS station at the Emergency Management Operations Center. In addition, a guardsman was embedded with electric providers who made that request.

By October 27th, no full-time customers whose facilities were in a position to take power and had been cleared by the proper governmental entity to receive power should have been without. Other than the providers mentioned below, all others were either fully restored or had fewer than 50 outages remaining:

- Duke Energy Progress had approximately 300 customers who were awaiting inspections by local agencies to disposition the properties. Duke continued to work with the local authorities to aid in restoring services and providing temporary services when requested.
- Horry Electric Cooperative had approximately 750 outages. Of this total, 450 were due to the flood waters, and 300 were due to damages on the customer side of the meter.
- Pee Dee Electric Cooperative had 150 outages, some of which may never be restored due to total destruction. Other reasons were flooding, damage to the customer side, washed-out roads and inaccessible services.

We continue our review of SCE&G's ongoing construction activities for V.C. Summer Units 2 &3. The hearing in Docket No. 2016-223-E, the SCE&G's BLRA budget and schedule update petition, concluded this month after three days of testimony. Allyn Powell and Gary Jones testified on behalf of the ORS in support of the settlement agreement reached at the end of August. The Commission's order in this case is due November 28, 2016. Westinghouse Electric Company, LLC (Westinghouse) and Fluor Corporation (Fluor) are both making steady progress toward implementing the results of the Functional Area Assessments conducted earlier in the year and are actively conducting studies in other areas to identify opportunities for further improvement.

Fluor in particular is making good progress toward meeting site staffing needs by ramping up recruitment efforts and using more creative methods such as hiring entire teams under a subcontract to complete certain scopes of work. Initial efforts in this area have shown promising results. Fluor has been able not only to meet its internal goals, but also to steadily revise those goals upward to work toward staffing a larger second shift. Fluor's hiring goals are now exiting the ramp-up phase and reflect current project need. Fluor is also engaged in detailed planning efforts for the staffing needed in 2017. The ORS is hopeful that this increased staffing will be especially beneficial for the Unit 3 schedule, where certain scopes of work are becoming closer to critical path due to resource allocation issues.

While there are still challenges and there is much work yet to be done, Westinghouse and Fluor appear to be working well, together with SCE&G, to address issues as they arise and bring them to a more timely resolution. Recently, some setbacks have occurred related to reinforced concrete, but working together they have been able to re-sequence construction in these areas to avoid schedule impacts. One area in which improvement has been slow to manifest is productivity factors. The ORS has been tracking this issue closely and is concerned about what these metrics may mean for areas of the plant off the current critical path for construction. The ORS was pleased to be informed that Westinghouse is also turning its attention to this issue and is completing a productivity evaluation on site, thereby looking at items such as site layout and more efficient staging of materials. Some of these productivity issues may also be due to the way work was tracked under a previous contract. The ORS is looking forward to the availability of the fully resource-loaded integrated construction schedule, which may affect the way these metrics are calculated to more accurately reflect subcontractors and give us better insight going forward. The fully resource-loaded integrated schedule is currently estimated to be available by the end of the calendar year.

The ORS achieved a settlement in the Duke Energy Progress rate case, which should save customers $22.8 million. Based on the settlement, a residential customer's monthly bill with 1,000 kWh usage would be $113.44 as opposed to the requested amount of $118.58 and the present amount of $101.98. A monthly bill comparison for the investor-owned utilities for a residential customer using 1,000 kWh is set forth below:

SCE&G	Duke Energy Carolinas	Duke Energy Progress	Lockhart
$147.53*	$110.84	$113.44**	$134.43

*As of November 27th, 2016, $27.03 or 18.32% of the $147.53 is attributable to the BLRA.
**Per settlement

The rate increase per the settlement will be implemented over a two-year period. This incremental approach will help mitigate the impact of the increase for all customer classes and is especially important to industrial customers for budgeting purposes.

We remain concerned about future costs incurred to dispose of coal ash that may be uniquely required under the North Carolina Coal Ash Management Act (CAMA). If Duke Energy Progress and/or Duke Energy Carolinas are required to undertake activities under CAMA that exceed the closure requirements of the Environmental Protection Agency's Coal Combustion Residual (CCR) rule or South Carolina's requirements, it is the ORS' position that those costs should not be recovered from South Carolina ratepayers. Also, if Duke Energy Carolinas and/or Duke Energy Progress resolve litigation related to coal ash disposal such that costs would exceed the CCR or South Carolina's requirements, it is our position that those costs should not be recovered from South Carolina ratepayers. In addition, any costs associated with penalties, fines, or the mishandling of coal ash disposal should not be recovered from South Carolina ratepayers. The disposal activities may meet the requirements of both CAMA and CCR; however, certain other activities would not. For example, the provision of drinking water wells in North Carolina, as required by the CAMA Amendment in the NC House Bill 630, would be the type of activity that does not serve a CCR-related purpose. We will carefully review recovery of coal ash costs in future proceedings. In addition, we will continue to identify those costs that should be allowed for ratemaking purposes in South Carolina as well as those that should be excluded from South Carolina rates.

After review by the Energy Office Advisory Committee, the Energy Office awarded $5,000 mini-grants to five entities for energy projects: The City of Cayce (lighting and energy efficiency education); Northeastern Technical College (lighting); Landrum High School (lighting and student education); Sustaining Way (solar installation at community demonstration house); and Georgetown School District (lighting). All projects will be monitored before final payments are made, and we expect to develop "success stories" about the projects that will help encourage others to undertake energy efficiency work.

The Energy Advisory Committee also reviewed two loan requests under the ConserFund program, one for a solar installation at a private school and one for multiple energy efficiency measures at a church. The loans were approved and executed by the ORS.

The Association of State Energy Managers annual meeting was held on October 27th. Milestone recognition awards were presented to public entities that met the legislatively mandated 20% energy reduction requirement this year.

Solar leasing applications continue to come in at a steady pace. In October, we received two applications and approved seven (some were holdovers from the prior month). To date, we have reviewed 37 applications and approved 24.

Consumer Services recovered a total of $4,784 for consumers in the prior month. This total includes the following notable recoveries:

- $1,399 for an electric customer due to being charged an incorrect rate
- $1,018 for an electric customer due to an error in assigned responsibility for the bill
- $2,217 for an electric customer due to erroneous charges

Applications for household goods movers (HHG) are trending upward, with 5 applications currently pending. Four HHG rate cases are also underway; a compliance audit was conducted at one HHG's place of business as part of the rate application process.

The annual audit of the ORS Pipeline Safety Program by the Pipeline and Hazardous Materials Safety Administration (PHMSA) was conducted in October. The three-day audit went well, and we are anticipating a favorable result.

The annual Railroad Report is complete and will be submitted to the General Assembly on or before November 14th. One of our rail inspectors was invited by the Federal Railroad Administration (FRA) to participate in a focused inspection on "monster" trains, so named because of their extended length. The FRA has safety concerns with regard to these oversized trains.

If you have any questions or concerns, please feel free to contact me. Thank you for your ongoing support of the Office of Regulatory Staff.

Sincerely,

C. Dukes Scott
Executive Director

November 30, 2016

Dear NAME:

The Select Committee on Energy Generation Financing composed of eight members and chaired by Rep. Sandifer met Tuesday, November 29, 2016.

During my presentation, I summarized the history of nuclear projects in South Carolina, particularly the financing, obstacles encountered, and lack of support for investment in new nuclear projects for many years until the passage of the Base Load Review Act (BLRA). Also, I summarized the Settlement Agreement regarding the construction of Units 2 and 3 at V.C. Summer and noted that the Settlement Agreement resolved the issue of the costs identified as "fixed" by causing those costs to be guaranteed by SCANA, even if Westinghouse fails to perform.

We continue our review of SCE&G's ongoing construction activities for V.C. Summer Units 2 and 3. Westinghouse Electric Company, LLC (Westinghouse) and Fluor Corporation (Fluor) continue to work toward finalizing the new resource-loaded fully integrated project schedule.

Delays for Unit 2 are beginning to accumulate. A repair solution for the concrete issues in Bay 1 of the Unit 2 Turbine Building has been finalized after an extended evaluation, and the repair should start before the end of the month. The setbacks related to reinforced concrete in Unit 2 have continued to affect the project. A contractor is currently removing the reinforced concrete in an area surrounding a penetration in the Shield Building. These, and other issues associated with the Shield Building, have delayed the expected substantial completion date of Unit 2 by several months to January 2020. Currently, no viable strategies exist to mitigate these delays.

Westinghouse has assembled a High Impact Team to address these delays. The primary job of this team is to prevent additional schedule slippage. The team is also charged with looking for ways to recover time in the schedule. While the project has experienced delays in the area of the Shield Building, other areas of Unit 2 are progressing well.

Progress continues with increasing craft labor staffing. Fluor is meeting and exceeding its internal targets and has increased those targets. Fluor is adding approximately 70 craft per week (taking into account those who leave) and has instituted a retention bonus in order to reduce attrition. The staffing at the end of the year is now expected to be approximately 4,000. Fluor is also using subcontractors to increase the number of workers on site. Westinghouse and Fluor have been exploring an idea that may allow additional staffing for Unit 3 via subcontracts and isolated work areas, but some challenges are associated with this idea, which is still under discussion. Without the implementation of such a plan, no clear path exists to bring Unit 3 staffing to the levels needed to support the schedule.

The ORS is also closely monitoring several other areas. In general, concrete work on both Units is failing to meet targeted completion dates. While some of this delay is attributable to resources and commodities, additional improvements in these areas are required to prevent affecting important module and equipment set dates. Production and productivity continue to be concerns, as the rates for core construction staff still remain well below the targeted values. Westinghouse and SCE&G are also still in discussions regarding the construction milestone payment schedule, which has been taken to the Dispute Resolution Board. Finalization of this schedule is expected in early December.

We received the results from our annual audit for Calendar Year 2015 that was conducted in October by the Pipeline and Hazardous Materials Safety Administration (PHMSA). The ORS received high scores – 48 out of 50 on the Progress Report and 99% on the Program Evaluation. The two-point deduction on the Progress Report score was due to the fact that the maximum civil penalty amount in South Carolina is below the federal maximum civil penalty amount. The one-point deduction on the Program Evaluation score was given because the Pipeline Safety program has not used its enforcement fining authority.

Three ORS staff members and I, along with a PHMSA official, served on a panel convened at the request of the S.C. Petroleum Pipeline Study Committee, of which I am a member. The overall purpose of the panel presentation and discussion was to review the roles of PHMSA, the ORS Pipeline Safety Program, and recent federal legislation regarding pipeline safety. The following is a summary of the presentation:

- The Pipeline and Hazardous Materials Safety Administration (PHMSA) is part of the U.S. Department of Transportation. The mission of PHMSA's Office of Pipeline Safety is to "protect people and the environment by advancing the safe transportation of energy and other hazardous materials that are essential to our daily lives."

- PHMSA's safety authority encompasses hazardous liquids, petroleum and petroleum products, highly volatile liquids, and carbon dioxide. PHMSA does not have siting authority for pipelines and is not involved with rights-of-way agreements between pipeline companies and landowners. After construction of a pipeline begins, PHMSA only becomes involved to monitor the operator's compliance with certain federal regulations.

- South Carolina has 67 miles of intrastate hazardous liquid pipelines and approximately 2800 miles of interstate hazardous pipeline. States like South Carolina that have pipeline safety programs are required to adopt the minimum federal pipeline safety regulations into state law and inspect and enforce them for the pipelines under their safety authority. In addition, state inspectors must complete the same training as their federal counterparts, which is provided at PHMSA's training facility in Oklahoma City. The recent federal pipeline legislation allows for state inspectors to observe any interstate pipeline inspections upon request.

Duke Energy Carolinas is currently in the process of upgrading their meter technology to smart meters (AMI). In response to customer concerns, Duke requested that the Commission approve a Manually Read Meter Rider.

Under the Rider, a customer would have the option to use a meter that does not use radio frequency to communicate, and the meter would be manually read by a meter reader. The customer who would elect service under this Rider would be subject to additional fees under the Rider, as follows:

- $150 initial set-up fee (one-time fee)
- $11.75/month rate to offset the costs related to manually reading the customer's meter

Our Telecommunications area administers, among others, the South Carolina Equipment Distribution Program (SCEDP). SCEDP provides telephone equipment for South Carolina residents who have trouble hearing or speaking over the telephone. The equipment is provided to program participants at no charge, and users can have the equipment for as long as they need to, so long as they have a telephone line and are a South Carolina resident. Clients are those that are deaf, hard of hearing, deaf-blind, blind/low vision with hearing loss, or speech impaired. Applicants must meet three qualifications to be eligible for the program. The qualifications are 1) be a legal, permanent resident of South Carolina 2) have telephone service and 3) have a permanent disability confirmed by one of the following: audiologist, physician, physician's assistant, advanced practice registered nurse, speech language pathologist, or a hearing instrument specialist. The funding for the program is a fee of $0.06 on all business and residential phone lines in the State. This fee funds the South Carolina Relay Service, the Equipment Distribution Program, Real-Time Closed Captioning of the news in the four market areas throughout South Carolina, and closed captioning for the General Assembly.

In emergency management, activity this month focused on after-action reviews following Hurricane Matthew. In addition, the ORS EMD team is conducting its own after-action review regarding Colonial Pipeline, which had a leak in September and a fire in November. In the November incident in which a backhoe hit the line and caused a fire, one casualty and several injuries occurred. The pipeline was shut down for repairs which took approximately six days; fuel supplies were not affected since the time offline was relatively short.

Solar leasing applications continue to come in at a steady pace. In November, we received one application and approved nine. To date, we have reviewed 38 applications and approved 33. Energy Office staff presented an update at the SC Solar Council meeting that included the most recent data regarding solar installations. Most striking is the exponential growth in a single year: Solar installations increased from 581 in 2015 to 2,935 in 2016.

The ORS Energy Office collaborated, for the first time, with a USC Environmental Policy Capstone course that engaged GIS students in an effort to support transportation planning by identifying areas where several types of transportation converge, thus showing where investments in alternative transportation may be the most effective. Students in the course created an elaborate tool which measures distances between assets (such as between a rail terminal and an industrial park) and shows how rail lines, natural gas pipelines, highways, and ports (inland and coastal) are related.

The Association of SC Energy Managers held its fall meeting at the end of October. I presented Milestone Achievement Awards to a total of seven agencies, colleges, and school districts that have met the mandate to reduce energy use by 20% consistently over a three-year period.

Palmetto Clean Fuels (PCF), a project of the Energy Office, organized a multi-agency response to the Federal Highway Administration's (FHA) request for nominations of alternative fuel corridors. All of the PCF nominations were accepted, and the FHA will now work with the Department of Transportation to establish appropriate signage advising motorists of the availability of electric and other charging stations.

The ORS achieved a settlement in the Duke Energy Progress rate case which will save customers $22,791,000.

A settlement was also reached in the SCE&G annual Purchased Gas Adjustment review.

If you have any questions or concerns, please feel free to contact me. Thank you for your ongoing support of the Office of Regulatory Staff.

Sincerely,

C. Dukes Scott
Executive Director